



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

*JK*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/297,591	05/03/1999	TAKANORI NAMBU	JA171	9975

27752 7590 12/28/2004

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
WINTON HILL TECHNICAL CENTER - BOX 161  
6110 CENTER HILL AVENUE  
CINCINNATI, OH 45224

EXAMINER

CHOI, FRANK I

ART UNIT PAPER NUMBER

1616

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/297,591

**Applicant(s)**

NAMBU, TAKANORI

**Examiner**

Frank I Choi

**Art Unit**

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1616

**DETAILED ACTION**

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 9/27/2004 has been entered.

***Claim Objections***

Claim 1 is objected to because of the following informalities: the bonds in formula for polymer (1) appear to be offset in that the bonds on CH<sub>2</sub> would exceed the valency of the carbon and there are no bonds on N which would render the nitrogen quaternized and the bonds to R<sub>3</sub>R<sub>2</sub>,R<sub>3</sub>,R<sub>4</sub>,R<sub>5</sub> appear to be offset in the formula for polymer (4). Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The rejection of claims 1-13 under 35 U.S.C. 103(a) over Grollier et al. (US Pat. 4,240,450) is withdrawn in that the reference does not specifically disclose the specified amphoteric polymer(s) claimed.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajino et al. (U.S. Pat. 5,254,333) for the reasons of record set forth in the prior Office Action and the further reasons below.

Kajino et al. teach a hair treatment composition comprising a combination of amphoteric, cationic and anionic polymers, solvent, and a nonionic surfactant, wherein the polymers are preferably used in an amount of from 0.01 to 10% by weight and the nonionic surfactants are those commonly used in the field of cosmetics for the purposes of providing a styling base, texture improvement or as a emulsifier, and the composition can be in the form of a mousse or aerosol (Column 2, lines 60-68, Columns 3-7, Column 8, lines 1-39, Column 12, lines 25-64).

Examiner has duly considered Applicant's arguments but deems them unpersuasive.

Applicant argues that the desired success of the present invention includes providing a hair styling composition which provides flexible and good holding film texture which allows re-arrangement of hair. However, the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. *In re Linter*, 173 USPQ 560 (CCPA 1972); *In re Dillon*, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991). Further, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136

USPQ 458, 459 (CCPA 1963). Applicant has provided no evidence that the composition in Kajino et al. lacks any holding characteristics or that penetration of the polymers contradicts the formation of a film. See *In re Geisler*, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a *prima facie* case of obviousness."). Finally, the claims do not require the formation of a film or that the film will be sufficiently flexible to permit rearrangement of the hair. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajino et al. (U.S. Pat. 5,254,333) in view of Grollier et al. (US Pat. 5,089,252) or Boerwinkle et al. (US Pat. 3,836,537) for the reasons of record set forth in the prior Office Action and the further reasons below.

Kajino et al. is cited for the same reasons as above and is incorporated herein to avoid repetition.

Grollier et al. (US Pat. 5,089,252) discloses that amphoteric polymers of betainised dialkylaminoalkyl(meth)acrylate or dialkylaminoalkyl (meth) acrylamide in combination with cationic polymers provide hold and the hair is soft to touch (Column 1, lines 48-68, Column 2,

Column 3, lines 1-6). It is taught that the composition can also contain anionic polymers (Column 13, lines 47-55).

Boerwinkle et al. (US Pat. 3,836,537) discloses a zwitterionic monomer having a carboxylate and ammonium functionality which provides hold and flexibility (Columns 1, 2).

The difference between the cited reference and the claimed invention is that the cited reference does not expressly disclose the combination of amphoteric, cationic and anionic polymers in the specified amounts. However, the prior art amply suggests the same as it is known in the art to formulate hair treatment compositions containing a mixture of the three types of polymers. Further, it would have been well within the skill to arrive at various amounts of the components through optimization of the prior art values based on the desired characteristics of the composition, for example, length of hold, flexibility and resistance to humidity.

Furthermore, one of ordinary skill in the art would have been motivated to modify the prior art as above with the expectation of formulating a hair treatment composition that imparts of good feeling to hair and is safe to hair and skin and will provide hold and flexibility (Kajino et al., Column 2, lines 1-11; Grollier et al. (US Pat. 5,089,252), Column 1, lines 48-68, Column 2, Column 3, lines 1-6 or Boerwinkle et al. (US Pat. 3,836,537), Columns 1, 2).

Examiner has duly considered Applicant's arguments but deems them unpersuasive for the same reasons as above.

Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been taught by the teachings of the cited reference.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grollier et al. (US Pat. 5,089,252) in view of Grollier et al. (US Pat. 4,796,646).

Grollier et al. (US Pat. 5,089,252) discloses that amphoteric polymers of betainised dialkylaminoalkyl(meth)acrylate or dialkylaminoalkyl (meth) acrylamide, typically used in an amount from 0.01 to 10% by weight, in combination with cationic polymers, typically used in an amount from 0.01 to 10%, preferably 0.05 to 5% by weight, provide hold and the hair is soft to touch (Column 1, lines 48-68, Columns 2-11). It is taught that the composition can also contain anionic polymers and nonionic surfactants and be in the form of aerosol foams or sprays (column 12, lines 27-68, Column 13, lines 1-31, 40-55).

Grollier et al. (US Pat. 4,796,646) discloses a mixture of anionic, cationic and amphoteric polymers and discloses that the concentrations of the polymers is suitably 0.01 to 10 by weight and that if the composition is intended more particularly as a foam, it is desirable to use concentration of cationic polymer of 0.01 to 5%, preferably 0.1 to 3%, and concentrations of anionic polymer of 0.01% to 5%, preferably 0.1 to 3% (Columns 2-11, Column 13, lines 40-46, Claims 6, 18)

The difference between the cited reference and the claimed invention is that the cited reference does not expressly disclose the combination of amphoteric, cationic and anionic polymers in the specified amounts. However, the prior art amply suggests the same as it is known in the art to formulate hair treatment compositions containing a mixture of the three types of polymers. Further, it would have been well within the skill to arrive at various amounts of the components through optimization of the prior art values based on the desired characteristics of the composition, for example, length of hold and flexibility. Furthermore, one of ordinary skill

Art Unit: 1616

in the art would have been motivated to modify the prior art as above with the expectation of formulating a hair treatment composition that will provide hold and flexibility

Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been taught by the teachings of the cited reference.

### ***Conclusion***


A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a flexible schedule. However, Examiner may generally be reached Monday-Friday, 8:00 am – 5:30 pm (EST), except the first Friday of the each biweek which is Examiner's normally scheduled day off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Gary Kunz, can be reached at 571-272-0887. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

FIC

December 27, 2004



JOHN PAK  
PRIMARY EXAMINER  
GROUP 1000